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Amendments to the claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

- increasing for the amended) Α method (currently 1. susceptibility of a cell to DNA-damaging agents, comprising introducing into the cell an antisense oligonucleotide that specifically hybridizes to a nucleic acid encoding a DNAsubunit dependent protein kinase so to prevent as expression of the DNA-dependent protein kinase subunit; wherein the antisense oligonucleotide is in an amount sufficient to increase the sensitivity of the cell to heat, chemical, or radiation-induced DNA damage; and wherein the DNA-dependent protein kinase subunit is a DNA-dependent protein kinase catalytic subunit, a Ku70, or a Ku80.
- 2. (original) The method of claim 1, wherein the antisense oligonucleotide is enclosed in a liposome prior to introduction into the cell.
- 3. (currently amended) A method of treating a tumor in a subject, comprising administering to the subject an antisense oligonucleotide that specifically hybridizes to a nucleic acid encoding a DNA-dependent protein kinase subunit so as to prevent expression of the DNA-dependent protein kinase subunit; wherein the antisense

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oligonucleotide is in an amount sufficient to increase the sensitivity of the tumor to heat, chemical or radiation-induced DNA damage; and wherein the DNA-dependent protein kinase subunit is a DNA-dependent protein kinase catalytic subunit, a Ku70, or a Ku80.

- 4. (original) The method of claim 3, wherein the antisense oligonucleotide is enclosed in a liposome prior to being administered to the subject.
- 5. (original) The method of claim 3, wherein the administering to the subject an antisense oligonucleotide comprises: administering to the subject an expression vector for the antisense oligonucleotide; and inducing the expression of the antisense oligonucleotide.
- 6. (original) The method of claim 3, further comprising administering to the subject one or more DNA-damaging agents.
- 7. (currently amended) The method of claim 6, wherein the DNA-damaging agents are selected from the group consisting of adriamycin, bleomycin, or and etoposide.
- 8. (original) The method of claim 6, wherein the DNA-damaging agents induce double strand breaks.
- 9. (currently amended) A method for treating cancer in a subject, comprising: introducing into the subject an expression vector comprising a heat shock promoter and an

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antisense oligonucleotide that specifically hybridizes to a nucleic acid encoding a DNA-dependent protein kinase subunit so as to prevent expression of the DNA-dependent protein kinase subunit; and inducing expression of the wherein antisense the oligonucleotide, amount sufficient to increase oligonucleotide is in an sensitivity of the cell to heat, chemical, the radiation-induced DNA damage; and wherein the DNA-dependent protein kinase subunit is a DNA-dependent protein kinase catalytic subunit, a Ku70, or a Ku80.

- 10. (original) The method of claim 9, wherein the antisense oligonucleotide is introduced selectively at sites of cancer.
- 11. (original) The method, of claim 9, further comprising directing heat, radiation, or chemotherapy at sites of cancer.
- 12. (original) The method of claim 9, further comprising applying electric field energy to sites of cancer.
- 13. (original) The method of claim 12, wherein the electric field energy comprises radiofrequency radiation.
- 14. (original) The method of claim 9, further comprising implanting a reservoir of chemotherapeutic agents near sites of cancer, wherein the chemotherapeutic agents are releasable over a period of time of at least eight hours.

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- 15. (currently amended) An antisense oligonucleotide that specifically hybridizes to a nucleic acid encoding a DNA-dependent protein kinase subunit, wherein the DNA-dependent protein kinase subunit is a DNA-dependent protein kinase catalytic subunit, or Ku70, or Ku80, so as to prevent expression of the DNA-dependent protein kinase subunit.
- 16. (currently amended) The antisense oligonucleotide of claim 15 linked to a substance which inactivates mRNA ribozyme.
- 17. (canceled)
- 18. (original) The antisense oligonucleotide of claim 15 linked to a regulatory element.
- 19. (original) The antisense oligonucleotide of claim 18, wherein the regulatory element is an inducible promoter.
- 20. (original) The antisense oligonucleotide of claim 18, wherein the regulatory element is a heat shock promoter.
- 21. (original) An expression vector adapted for the expression of the antisense oligonucleotide of claim 15.
- 22. (amended) An expression vector adapted for the expression of the antisense oligonucleotide of claim 16.
- 23. (original) A pharmaceutical composition comprising the antisense oligonucleotide of claim 15 and a carrier.
- 24. (amended) A pharmaceutical composition comprising the

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antisense oligonucleotide of claim 16.

- 25. (canceled)
- 26. (canceled)